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EXAMINER	
FONTAINE, MONICA A	

ART UNIT	PAPER NUMBER
1732	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/964,838	NILSSON ET AL.	
	Examiner	Art Unit	
	Monica A Fontaine	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 September 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 26-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 26-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 (and dependent claims 26-56) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, the claim is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors. The following is a exemplative list of verbage which raises questions about language clarity, but it is by no means exclusive.

It is not clear whether the décor is an independent layer or whether the "décor and a wear layer" are the same layer. The phrase "one or more structural surfaces, forming embossing surfaces of one or more rollers or moulds" does not make sense; it is not clear whether the structural surfaces form the surfaces of the molds or whether the surfaces of the molds form the structural surfaces. It is not clear whether the "one or more structural surfaces" is an additional independent layer formed on top of the "decorative laquered surface" (see lines 4-5) or whether it is part of a layer. It is not clear whether "having cured the laquer to a desired viscosity" is a limitation, since it is preceeded by "possibly". It phrase "continuously or discontinuously pressed on to this" (see lines 6-7) is without antecedent (to what does "this" refer?).

For purposes of examination, the following will be observed:

a. there are three distinct layers: a base layer, a décor layer, and a wear layer

b. the structural surfaces are part of the décor layer and are formed by rollers or molds

c. having cured the laquer to a desired viscosity is not a requirement since "possibly" is alternative language

d. rollers are continuously or discontinuously pressed toward the décor layer

Regarding Claim 32, the claimed glazing rollers function to plane the surface of the formed article (see specificiation page 2), so it is unclear what specific "glazing" function they have other than to smooth the article and what distinction they have from the structured roller. Therefore, it is interpreted that the "glazing" rollers can be any rollers which function to form a smooth plane in the article.

Regarding Claims 33 and 34, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte*

Steigewald, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 33 recites the broad recitation "above 40°C", and the claim also recites "range of 50°C - 150°C" which is the narrower statement of the range/limitation. In the present instance, claim 34 recites the broad recitation "above 30°C", and the claim also recites "range of 35°C - 100°C" which is the narrower statement of the range/limitation. For purposes of examination, the more narrow ranges in each claim are being interpreted as merely exemplary of the remainder of the claim and therefore not required.

Claims 34 recites the limitation "the glazing rollers" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 47 and 48, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding Claims 51 and 52, it is unclear what about the counter stay is "in the range of T minus 0.7mm-0.9mm".

Regarding Claims 53-55, the location or area in which the claimed pressure occurs is unclear.

Regarding Claim 56, the location or area in which the claimed temperature occurs is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 26-35-40, 45-50, and 55-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansson et al. (U.S. Patent 6,565,919). Regarding Claim 1, Hansson et al., hereafter "Hansson," show that it is known to carry out a process for the manufacturing of a decorative surface element, which element comprises a base layer, a décor and a wear layer of a UV or electron beam curing laquer, characterized in that one or more structured surfaces, forming embossing surfaces of one or more rollers or moulds, are positioned on top of the decorative laquered surface, and are continuously or discontinuously pressed on to [the décor], whereby the laquer will be provided with a surface structure which enhances the decorative effect of the décor, whereupon the wear layer is completely cured (Column 1, lines 58-67; Column 3, lines 12-53; Column 4, lines 44-49).

Regarding Claim 26, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the laquer consists of an acrylic or a maleamide laquer (Column 3, lines 19-20).

Regarding Claim 27, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the wear layer is applied in several steps with intermediate partial curing (Column 3, lines 20-21).

Regarding Claim 28, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the wear layer includes hard particles with an average particle size in the range of 50nm-150um (Column 3, lines 58-61).

Regarding Claim 29, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the base layer consists of a particle board or a fibre board (Column 2, lines 59-60).

Regarding Claim 30, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the base layer consists mainly of a polymer (Column 2, lines 63-67).

Regarding Claim 31, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the surface element contains a layer which is elastic at least before the complete curing, the elastic layer being the base layer (Column 3, lines 1-10).

Regarding Claim 32, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein one or more glazing rollers is pressed towards the surface structured wear layer before the complete curing stage (Column 11, lines 34-37; Column 12, lines 37-40).

Regarding Claim 33, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the structured rollers are heated to a surface temperature of above 40°C (Column 4, lines 9-14).

Regarding Claim 34, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the structured rollers are heated to a surface temperature of above 30°C (Column 4, lines 9-14).

Regarding Claim 35, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein a thin top coat is applied on top of the structured wear layer (Column 3, lines 44-50).

Regarding Claim 36, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, including a method wherein a thin top coat is applied on top of the structured wear layer after the glazing stage (Column 11, lines 37-41).

Regarding Claim 37, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, including a method wherein a thin top coat is applied on top of the structure wear layer before the glazing stage and that the top coat is partially cured before the glazing (Column 13, lines 16-31).

Regarding Claim 38, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 35 above, including a method wherein the top coat is comprised of acrylic or maleamide laquer and optionally an additive in the form of hard particles with an average size in the range of 50nm - 10um (Column 3, lines 18-30).

Regarding Claim 39, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein each structured roller is provided with a counter stay roller between which the surface element is passed (Column 4, lines 44-46).

Regarding Claim 40, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 32 above, including a method wherein each glazing roller is provided with a counter stay roller between which the surface element is passed (Column 4, lines 44-46).

Regarding Claim 45, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the structured surface of the mold is heated to a surface temperature above 40°C (Column 4, lines 7-14).

Regarding Claim 46, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 45 above, including a method wherein the pressure exercised by the structured mold surface is 50-200 Bar (Column 4, lines 7-14).

Regarding Claim 47, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 28 above, wherein the hard particles consists of silicon oxide, a-aluminum oxide or silicon carbide (Column 4, lines 1-3).

Regarding Claim 48, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 28 above, including a method wherein the main part of the hard particles consists of silicon oxide, a-aluminum oxide or silicon carbide while a smaller amount of the hard particles consist of diamond (Column 4, lines 1-3).

Regarding Claim 49, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 28, and 48 above, including a method wherein the hard particles consisting of diamond is in the average particle size range of 50nm-2um and is placed close to the upper surface of the wear layer (Column 3, lines 24-31, 54-67; Column 4, lines 1-4).

Regarding Claim 50, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 30 above, including a method wherein the polymer is polyurethane (Column 2, lines 60-62).

Regarding Claim 55, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 45, and 46 above, including a method wherein the pressure is 65-100 Bar (Column 4, lines 7-14).

Regarding Claim 56, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 45 above, including a method wherein the temperature is in the range of 50°C-150°C (Column 4, lines 9-14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 41-44, and 51-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansson, in view of Andersen et al. (U.S. Patent 5,720,913).

Regarding Claim 41, Hansson shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show a specific distance between the structure forming rollers. Andersen et al., hereafter "Andersen," show that it is known to carry out a method of making a decorative element (Column 4, lines 11-27) wherein the surface element has a thickness T and that the distance between each structured roller and corresponding counter stay is set in the range

T minus 0.5mm-1.2mm (Column 36, lines 7-30; Column 59, lines 15-33, 65-67; Column 60, lines 1-25). Andersen and Hansson are combinable because they are concerned with a similar technical field, namely, that of molding decorative composite articles. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Andersen's roller clearance in Hansson's molding process in order to obtain an article with the desired amount of thickness.

Regarding Claim 42, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 41 above, including a method wherein the pressure between each structured roller and its corresponding counter stay is 50-200Bar (Column 4, lines 7-14), meeting applicant's claim.

Regarding Claim 43, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 40 above, but he does not show a specific distance between the structure forming rollers. Andersen shows that it is known to carry out a method of making a decorative element wherein the surface element has a thickness T and that the distance between each structured roller and corresponding counter stay is set in the range T minus 0.7mm-1.2mm (Column 36, lines 7-30; Column 59, lines 15-33, 65-67; Column 60, lines 1-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Andersen's roller clearance in Hansson's molding process in order to obtain an article with the desired amount of thickness.

Regarding Claim 44, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 40, and 43 above, including a method wherein the pressure between each glazing

roller and its corresponding counter stay is 0.1-10Bar (Column 4, lines 7-14), meeting applicant's claim.

Regarding Claim 51, Hansson shows the process as claimed as discussed in the rejection of Claims 1 and 41 above, but he does not show a specific distance between the structure forming rollers. Andersen shows that it is known to carry out a method of making a decorative element wherein the distance between each structured roller and corresponding counter stay is set in the range T minus 0.7mm-0.9mm (Column 36, lines 7-30; Column 59, lines 15-33, 65-67; Column 60, lines 1-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Andersen's roller clearance in Hansson's molding process in order to obtain an article with the desired amount of thickness.

Regarding Claim 52, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 40, and 43 above, but he does not show a specific distance between the structure forming rollers. Andersen shows that it is known to carry out a method of making a decorative element wherein the distance between each structured roller and corresponding counter stay is set in the range T minus 0.7mm-0.9mm (Column 36, lines 7-30; Column 59, lines 15-33, 65-67; Column 60, lines 1-25). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Andersen's roller clearance in Hansson's molding process in order to obtain an article with the desired amount of thickness.

Regarding Claim 53, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 41, and 42 above, including a method wherein the pressure is 65-100Bar (Column 4, lines 7-14), meeting applicant's claim.

Regarding Claim 54, Hansson shows the process as claimed as discussed in the rejection of Claims 1, 40, 43, and 44 above, including a method wherein the pressure is 65-100Bar (Column 4, lines 7-14), meeting applicant's claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Maf
February 5, 2004

MICHAEL COLAIANNI
PRIMARY EXAMINER